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ELECTRONICS FACILITIES IN CUBA
(SUPPLEMENT)

NAVY, USAF AND USMC
Declassification/Release Instructions on File

CIA/RR EP 63-5
January 1963

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CENTRAL INTELLIGENCE AGENCY

Office of Research and Reports

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FOREWORD

This publication is a supplement updating, wherever possible, CIA/RR EP 60-73, Electronics Facilities in Cuba, 1 November 1960, SECRET. Much of the data contained in EP 60-73 remains valid, but some significant changes have occurred since 1960, especially in the area of radio and television broadcasting. In addition to the updated information presented in this supplement, references have been made to publications containing other pertinent information on electronics facilities in Cuba. For data on underground sites and facilities in Cuba, some of which have associated communications facilities, see CIA OCR/IR, Cuba: Underground Sites and Facilities, 9 November 1962, SECRET/NO FOREIGN DISSEM/NO DISSEM ABROAD.

The data in this supplement are given under the same title and in the same sequence as in the original publication. Information is not available to update the annexes, but their validity is still considered high, as they are predominantly documentary in nature.

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ELECTRONICS FACILITIES IN CUBA*
(SUPPLEMENT)

I. Introduction

Detailed information on military electronics facilities in Cuba is now available in the following documents:

USAF, Tactical Air Command, DI 24/62, Target Study, the Republic of Cuba, January 1962, SECRET/NOFORN.

USMC, Fleet Marine Forces Atlantic, FMFLANT AAS-14 (2 volumes), Area Study of Cuba, November 1960 (changes through March 1962), SECRET.

II. Organization and Management of Electronics Facilities

The Ministry of Communications has continued to extend its control over Cuban telecommunications. Since 1960 the Ministry has assumed operational control and management of the Red Oficial de Comunicaciones por Microondas (ROCMI) microwave and very-high-frequency (VHF) network; has reduced its dependence on foreign-owned international telecommunications companies through the expansion of its international point-to-point radio facilities; and has taken over the transmission facilities of Agencia Prensa Latina, or Prensa Latina, the Cuban official news service. Although the ROCMI network still remains a primary telecommunications medium for military requirements,** those requirements that cannot be absorbed by it are being met through the utilization of other civil networks.

In June 1962 the Council of Ministers created the Cuban Radio Broadcasting Institute (Instituto Cubano de Radiodifusion -- ICR), which assumed control of all radio and television broadcasting from the Ministry of Communications. Ramiro Puerta Quiroga was appointed director general of ICR along with the following three deputy directors: Jose Antonio Caines Sierra, in charge of domestic radiobroadcasting; Gregorio Ortega y Suarez, in charge of domestic television broadcasting;

* The estimates and conclusions in this publication represent the best judgment of this Office as of 15 January 1963.

** For further information on the possible use of the ROCMI network for military command and control purposes, see CIA/RR CB 62-25, Possible Use of Military Microwave Network in Cuba for Command-Control Purposes, 2 November 1962, SECRET/NO FOREIGN DISSEM.

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and Marcos Behemaras, in charge of international radiobroadcasting (Radio Havana Cuba).*

As there have been substantial changes in Cuban electronics and telecommunications personnel since 1960, the biographic information contained in the original study should be used with caution. Current information on prominent radio and television personalities, however, is as follows:

Juan Marti

Director of the Television Revolution television network.

Violeta Casals

Director general of the Radio Rebelde network.

Amaury Perez

Director of the CMQ network.

Celestino Garcia Suarez

Director of the Radio Progreso network.

Leoncio Perez Linares

Subdirector of the Radio Progreso network.

Orlando Martinez

Director of the Radio Musical Nacional network.

Santiago Frayle

Director of the Reloj Nacional network.

Angel Hernandez

Director of the radio station The Friendly Voice of Cuba.

* The offices of ICR reportedly are located on the third and fourth floors of the Edificio Radiocentro, Calle "M" between 21st and 23d, Vedado, Havana.

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Barbara Collins, "Marge" McCurdy, Robert F. Williams, Jo Salas,
and Carlos (Moore?)

Announcers and/or commentators on The Friendly Voice of Cuba,
Radio Free Dixie, and/or the Cuban International Service
(Radio Havana Cuba).

Ramiro Puerta Quiroga

Director general of ICR, which controls all radio and tele-
vision broadcasting.

Jose Antonio Cainas Sierra

Deputy director of ICR; he is responsible for domestic radio-
broadcasting.

Gregorio Ortega y Suarez

Deputy director of ICR in charge of domestic television broad-
casting.

Marcos Behemaras

Deputy director of ICR in charge of international radiobroad-
casting (Radio Havana Cuba).

Jose F. Carneado

Director general of Prensa Latina, replacing the former
director general, Fernando Revuelta.

Luis Gomez Wanguemert

Commentator of major importance on television and radio.

Jose Gonzales Jerez

Commentator on the CMQ-TV network.

Jose Miguel Fornes

Commentator on the Radio Progreso network.

Mario Kuchilan

Commentator on the CMQ-TV network.

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Raul Valdes Vivo

Important figure in radio propaganda.

Gregorio Goldenberg

Commentator on the Radio Rebelde network.

Guillermo Santiesteban

Commentator on the Radio Rebelde network.

III. Capabilities and Vulnerabilities

The capabilities and vulnerabilities of Cuban electronic resources remain for the most part unchanged. Minor qualifications and changes are reflected in V, below.

IV. General Statistics

Available information is inadequate to update the statistical data on Cuban electronics facilities, but no major changes in these data are believed to have occurred.

V. Plans and Intentions

Information concerning the expansion and improvement of the Cuban telecommunications system since 1960 is as follows:

Microwave -- Plans for the improvement and expansion of the ROCMI network, now under the Director General of Telecommunications of the Ministry of Communications, have not been fully realized. This network continues to operate at less than satisfactory standards of reliability and quality and, in some cases, at less than its designed capacity of 24 telephone channels. Plans for the expansion of VHF feeder lines, however, have been realized (see the reference of Figure 2*).

Plans calling for the expansion of the ROCMI network to 120 telephone channels by 1965 are in the early stages of implementation. These plans may not be achieved, inasmuch as the Bloc will be relied on to provide the equipment and present Bloc production lags behind current Bloc needs. Fulfillment would require a high priority in Bloc planning and allocation. For detailed specifications of the equipment which would be needed to expand the ROCMI network from 24 to 120 telephone channels, [REDACTED]

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* P. 8, below.

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Telephone -- Plans to import telephone sets and rotary telephone, central-office switching equipment from Hungary apparently remain unchanged. Central offices scheduled to receive this equipment include the Arroyo-Havana central office and the central offices in Holguin, Victoria de las Tunas, Santiago de Cuba, Tarara, Guines, and San Antonio de Los Banos. Serious delays encountered in the operational use of these exchanges are anticipated, as they are not compatible with existing step-by-step exchanges. This lack of compatibility will necessitate the provision of separate central office facilities for rotary exchanges and the design and construction of equipment for interconnecting rotary and step-by-step facilities.

New plans have been formulated to increase the capacity of the Cuban long-distance telephone wireline and cable network through the installation of Hungarian carrier equipment. Although these plans, as shown in the tabulation below, were to be executed initially in 1962,

Proposed Carrier System
for the Cuban Long-Distance Telephone Network
1962

		Carrier System		
From Central Office	To Central Office	Type	Total Telephone Channels	Total Telegraph Channels
Havana	Santiago de las Vegas	BK-12*	60	
Havana	Cotorro	BK-12	36	
Cotorro	Guines	BO-12**	24	
Cotorro	Santa Clara	BO-12	12	
Santa Clara	Placetas	BO-12	12	
Placetas	Trinidad	BO-12	12	
Santa Clara	Ciego de Avila	BO-12	12	
Ciego de Avila	Camaguey	BO-12	12	
Camaguey	Victoria de las Tunas	BO-12	12	
Victoria de las Tunas	Holguin	BO-12	12	
Victoria de las Tunas	Santiago de Cuba	BO-12	12	
Santiago de las Vegas	Surgidero de Batabano	VTO-3/4***	6	8
Santo Domingo	Sagua la Grande	VTO-3/4	3	4
Santo Domingo	Cienfuegos	VTO-3/4	3	4
Camaguey	Santa Lucia	VTO-3/4	3	4

* Twelve-telephone-channel carrier equipment for use on cable lines, manufactured by the Beloiannis Telecommunications Plant, Budapest, Hungary.

** Twelve-telephone-channel carrier equipment for use on open wirelines, manufactured by the Beloiannis Telecommunications Plant, Budapest, Hungary.

*** Three-telephone plus four-telegraph-channel carrier equipment, manufactured by the Beloiannis Telecommunications Plant, Budapest, Hungary.

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delays in the supply of equipment may retard the completion of this project by as much as 2 years. The Hungarian Beloiannis Telecommunications Plant is to begin delivery of BO-12 (12-telephone-channel) carrier equipment for wirelines by the end of 1962 but will be unable to deliver the BK-12 (12-telephone-channel) carrier equipment for cable lines. Efforts now are being made to obtain equipment comparable to the BK-12 from East Germany for installation in 1963-64. The delivery schedule from Hungary of VTO-3/4 (3-telephone and 4-telegraph channel) carrier equipment for feeder wirelines is unknown.

Telegraph -- Plans for expansion and improvement of the Cuban telegraph system remain unchanged. Execution of these plans, however, is progressing at a slow rate. The only telegraph offices known to have received teletype equipment are those serving the armed forces.

Point-to-Point Radio -- Agencia Prensa Latina now maintains a regular schedule of transmissions to Latin America and Europe. Its transmitting facilities have been augmented by additional transmitters at Bauta.

Radiobroadcasting -- With the completion of the multimillion-dollar international radiobroadcasting station at Bauta, Cuba now ranks first among all the countries of the Caribbean and Central and South America in number of hours of international broadcasting per day. There are indications that Radio Havana Cuba intends to maintain this lead by adding new transmissions. New languages to be added reportedly include Russian and Chinese.

In the field of domestic broadcasting, ICR can be expected to continue the vast reorganization, started in the summer of 1961, which promises to make the domestic radio system into a more manageable propaganda tool with which to manipulate the Cuban people. As part of this reorganization, twelve 5-kilowatt (kw) and three 50-kw transmitters were purchased from Hungary early in 1962 to refurbish the wornout and poorly maintained equipment in use. Eventually, the domestic broadcasting system probably will be reduced to 3 or 4 nationwide networks (studios in Havana) of about 12 stations each, a single minor network of 3 or 4 stations for 5 of the 6 provinces, and 12 or more local stations.

Television -- Many radio-television exchange agreements have been signed with Sino-Soviet Bloc countries. This close cooperation is certain to continue.

Improvements in television technical facilities can be expected in the future as efforts are made to bring all Cuba within range of the two national television networks. In early 1962, for example, television

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was extended to the westernmost province of Pinar del Rio by the erection of broadcasting stations in San Cristobal and Consolacion del Sur. Further expansion, however, will depend largely on the availability of parts and equipment, commodities which currently seem to be in short supply.

Tropospheric Scatter Radio -- There has been no further evidence of plans for the establishment of a tropospheric scatter radio circuit to connect Havana and the Isle of Pines.

International Telecommunications -- As anticipated, Cuba has decreased reliance on foreign-owned international telecommunications companies through the expansion of its own international point-to-point radio facilities (see Figure 12).

Sino-Soviet Bloc Assistance -- There are no indications that since 1960 Bloc countries have accelerated their supply of nonmilitary electronics equipment to Cuba. In fact, there have been frequent references to delays in equipment deliveries.

Appendixes

Appendix A. Biographical Sketches

See II, above.

Appendix B. Electronic and Communications Equipment Delivered to Cuba Under the Military Assistance Program of the US, 1953 - 30 June 1960

This program has been discontinued.

Appendix C. Source References

Sources used in the preparation of this publication are in the files of this Office.

Illustrations

Figure 1. Cuba: Electronics Facilities: Long-Distance Telephone Routes, Local Offices, and Sugar Mill Exchanges (Map)

There have been no significant changes.

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Figure 2. Cuba: Electronics Facilities: Microwave, VHF, and UHF Networks Installed by RCA International (Map)

The following additions should be made to the map:

1. VHF network: all broken lines should be made solid lines (circuit in operation), and all station symbols should be changed to a double circle (station in operation).
2. Add a solid brown line (VHF network, 6-telephone-channel circuit in operation) between Guane ($22^{\circ}12' \text{ N} - 84^{\circ}05' \text{ W}$) and San Julian ($22^{\circ}07' \text{ N} - 84^{\circ}08' \text{ W}$), and add a brown double circle (station in operation) at San Julian.

Figure 2A. Cuba: Electronics Facilities: Microwave and VHF Facilities Installed by RCA International (Photographs)

The information remains unchanged.

Figure 3. Cuba: Electronics Facilities: Submarine Telephone and Telegraph Cable Chart (Map)

The information remains unchanged.

Figure 4. Cuba: Electronics Facilities: Simplified Diagram of the Telegraphic Wireline Network (Map)

No additional information is available.

Figure 5. Cuba: Electronics Facilities: Circuito CMQ Microwave Radio Relay Network (Map)

Facilities of the CMQ microwave radio relay network remain unchanged, but there have been changes in the dropoff points for radio and television broadcasting. Reference should be made to Figures 7 and 8 for current information on these dropoff points.

Figure 6. Cuba: Electronics Facilities: USAF/USN Flight Information, Enroute (Tables and Map)

For current information to update the tables and map, see the following document:

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USAF/USN. Enroute Supplement to the Flight Information Publication for the Caribbean and South America, Oct 62.
U.

Figure 7. Cuba: Electronics Facilities: Television Stations and Networks (Map)

The following information should be added to the map:

1. Retransmission station (network affiliation unknown) at San Cristobal (22°43' N - 83°02' W).
2. Retransmission station (network affiliation unknown) at Consolacion del Sur (22°30' N - 83°30' W).

Delete from the map all of the following symbols:

1. Retransmission station reported to be associated with the CMBF television network.
2. Local television station.
3. Planned television station.
4. UHF television station.

The following information supersedes that on the apron to the map:

Cuban Television Broadcasting System

Before the forces of Fidel Castro assumed control of Cuba, there were three nationwide television networks extending from Havana, where all programs originated, east to Oriente Province. In addition, Havana had three local television stations and the interior city of Camaguey had a local television station of its own. Only the westernmost province of Pinar del Rio was without television. Now there exist only two nationwide networks, all other stations having been taken out of operation. The two existing networks, CMQ-TV and CMBF Television Revolucion, have been extended into Pinar del Rio so that all of Cuba is now within the range of this most effective propaganda medium. The equipment for this expansion and the spare parts needed to keep the networks in operation apparently have come from the now defunct CMAB-TV network and the four Havana and Camaguey stations.

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As with radiobroadcasting, all television has been placed under the control of ICR, a body subject directly to the Council of Ministers. The ICR deputy director for television is Gregorio Ortega y Suarez, former government intervenor of the CMQ radio and television chains. Ortega seems to be having trouble maintaining even a rudimentary service for Cuban viewers, for programing has recently been cut back from 13 hours to about 8 hours per day for each network. The three news-casts broadcast daily by the CMQ-TV network are relayed by CMBF Television Revolution and comprise the entire news output of both nets. Indoctrination and entertainment comprise the remainder of the transmission schedules.

Unfortunately, much of the data presented on pages 11 and 12, below, on television stations in the provinces cannot be confirmed. Only the channels used by Havana (channels 4 and 6) have been confirmed by monitoring. Studios for CMQ-TV are in the Edificio Radiocentro, Calle "M" between 21st and 23d, Vedado, Havana, with supplemental studios in the Edificio Focsa, Calle "M" and 17th, Vedado, Havana. Studios for CMBF-TV reportedly are at Calles San Miguel and Mazon, Havana.

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Cuban Television Stations

City	Present Call Letters	Present Network	Channel Number	Frequency (Megacycles)		Transmitter Power (Kilowatts)	Effective Radiated Power (Kilowatts)	Address of Transmitting Antennas
				Video	Audio			
Havana	CMEF-TV	CMEF-TV	4	67.2	71.7	10	125	Finca Potrero de Coca, Barrio El Cano, Municipio de Marianao, Havana Province
Havana	CMQ-TV	CMQ-TV	6	83.2	87.7	10	125	Finca Potrero de Coca, Barrio El Cano, Municipio de Marianao, Havana Province
San Cristobal	N.A.	N.A.	7	175.2	179.7	N.A.	N.A.	Finca El Tejar, San Cristobal, Pinar del Rio Province
Consolacion del Sur	N.A.	N.A.	3	61.2	65.7	N.A.	N.A.	Consolacion del Sur, Pinar del Rio Province
Matanzas	CMGQ-TV	CMQ-TV	9	187.2	191.7	0.5	3	Finca San Juan, La Cumbre, Matanzas Province
Matanzas	CMG-TV	CMEF-TV	13	211.2	215.7	5	5	Finca San Juan, La Cumbre, Matanzas Province
*Limonar	CMGH-TV		11	199.2	203.7	5	5	Loma de Jacan, San Miguel de los Banos, Limonar, Matanzas Province
Santa Clara	CMHQ-TV	CMQ-TV	5	77.2	81.7	5	18	Loma Dos Hermanos, San Vicente, Santa Clara, Las Villas Province
Santa Clara	CMRA-TV	CMEF-TV	8	181.2	185.7	N.A.	N.A.	Finca Sarduy, Hacienda Escambray, Barrio Seibabos, Santa Clara, Las Villas Province
*Santa Clara	CMH-TV		3	61.2	65.7	5	31	Loma Cerro Calvo, Santa Clara, Las Villas Province
Camaguey	CMJ-TV	CMEF-TV	4	67.2	71.7	5	18	Barrio Maraguan, Camaguey Province
Camaguey	CMJL-TV	CMQ-TV	6	83.2	87.7	10	56	Barrio Maraguan, Camaguey Province

NOTE: An asterisk (*) indicates that the transmitter is believed to be inactive. All stations operate with 525 lines and 30 frames.

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City	Present Call Letters	Present Network	Channel Number	Frequency (Megacycles)		Transmitter Power (Kilowatts)	Effective Radiated Power (Kilowatts)	Address of Transmitting Antennas
				Video	Audio			
*Camaguey	CMFE-TV		9	187.2	191.7	5	5	Loma Monroya, Finca Flora, Hato Arriba, Camaguey Province
*Camaguey	CMFG-TV		11	199.2	203.7	N.A.	N.A.	Finca Jamaya, kilometer 574 on Carretera Central, Camaguey Province
Ciego de Avila	CMFD-TV	CMQ-TV	7	175.2	179.7	5	18	Ciego de Avila, Camaguey Province
*Ciego de Avila	CMJA-TV	CMBF-TV	2	55.2	59.7	5	N.A.	Kilometer 465 on Carretera Central, Ciego de Avila, Camaguey Province
Jatibonica	CMFF-TV	CMBF-TV	12	205.2	209.7	5	5	Loma Contigua, Sierra Buenavista, Jatibonica, Camaguey Province
Holguin	CMLD-TV	CMBF-TV	8	181.2	185.7	5	5	Holguin, Oriente Province
Holguin	CMKJ-TV	CMQ-TV	3	61.2	65.7	5	N.A.	Loma de la Cruz, Holguin, Oriente Province
*Holguin	CMLF-TV		13	211.2	215.7	5	5	Finca Jagueyes, Barrio de San Augustin, Holguin, Oriente Province
Santiago de Cuba	CMKU-TV	CMQ-TV	2	55.2	59.7	5	14	Finca San Miguel de las Enramadas, Municipio de San Luis, Oriente Province
Santiago de Cuba	CMLB-TV	CMBF-TV	5	77.2	81.7	5	5	Finca San Miguel de las Enramadas, Municipio de San Luis, Oriente Province
*Santiago de Cuba	CMCL-TV		7	175.2	179.7	5	5	Finca la Alegria, Loma El Secadero, San Luis, Oriente Province
*Santiago de Cuba	CMLE-TV		10	193.2	197.7	5	5	Santiago de Cuba, Oriente Province

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The CMQ-TV Network

Controlled by
Instituto Cubano de Radiodifusion (ICR)

Channel 6: CMQ-TV, Televilla 125/62.5 kw

This network is believed to have relay stations in the following cities: Camaguey, Consolacion del Sur or San Cristobal, Ciego de Avila, Holguin, Matanzas, Santa Clara, and Santiago de Cuba. Studios are in the Edificio Radiocentro, Calle "M" between 21st and 23d, Vedado, Havana, and the Edificio Focsa, Calle "M" and 17th, Vedado, Havana.

<u>Greenwich Mean Time</u>	<u>All programs are in Spanish</u>
1700 - 0415	Approximate over-all transmission time:
1700 - 1800	Indoctrination and entertainment
1800 - 1900	NEWS/COMMENT (not Sunday)
1900 - 2230	Test pattern -- no program
2230 - 0030	Indoctrination and entertainment
0030 - 0115	NEWS/COMMENT (not Monday)
0115 - 0400	Indoctrination and entertainment
0400 - 0415	NEWS Summary

The CMBF Television Revolution Network

Controlled by
Instituto Cubano de Radiodifusion (ICR)

Channel 4: CMBF-TV, Televilla 125/62.5 kw

This network is believed to have relay stations in the following cities: Camaguey, Holguin, Jatibonica, Matanzas, San Cristobal or Consolacion del Sur, Santa Clara, Santiago de Cuba, and Victoria de las Tunas. This network uses studios at Calles San Miguel and Mazon, Havana.

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<u>Greenwich Mean Time</u>	<u>All programs are in Spanish</u>
1700 - 0415	Approximate over-all transmission time:
1700 - 1800	Indoctrination and entertainment
1800 - 1900	Relay of CMQ-TV (not Sunday)
1900 - 2230	Test pattern -- no program
2230 - 0030	Indoctrination and entertainment
0030 - 0115	Relay of CMQ-TV (not Monday)
0115 - 0400	Indoctrination and entertainment
0400 - 0415	Relay of CMQ-TV

Figure 8. Cuba: Electronics Facilities: Radiobroadcasting Stations
(Map)

The following information supersedes that on the map and
its apron:

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AM Radiobroadcasting Stations

City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Artemisa	1,240	CMAD	0.25	N.A.	Maceo 5205, Artemisa, Pinar Del Rio Province	Edificio El Globo, Pinar del Rio, Pinar del Rio Province
Banes	1,020	CMDO	0.25	Radio Banes	Avenida de Cardenas 40, Banes, Oriente Province	Avenida de Cardenas 40, Banes, Oriente Province
Baracoa	1,450	CMDX	0.25	Radio Baracoa	Cespedes y Coronel Galano, Baracoa, Oriente Province	Cespedes y Coronel Galano, Baracoa, Oriente Province
Bayamo	*820	*CMDT	0.25	N.A.	Bayamo, Oriente Province	Bayamo, Oriente Province
Bayamo	1,200	CMDD	0.25	N.A.	Relay station. See Santiago de Cuba, 850 kilocycles (kc), CMKC	Kilometer 842 on Carretera Central, Bayamo, Oriente Province
Bayamo	1,260	CMDE	0.25	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Finca Tablada, Barrio Horno, Bayamo, Oriente Province
Bayamo	1,390	CMKX	0.25	CMKX Revolucionaria	Libertad 2, Bayamo, Oriente Province	Libertad, Altos del Teatro Estrada, Bayamo, Oriente Province
Cabaiguan	*1,590	*CMHY	0.10	N.A.	B y C, Cabaiguan, Las Villas Province	B. Maso, Cabaiguan, Las Villas Province
Caibarien	1,020	CMHS	1	Radio Caibarien Revolucionaria	Agramonte y Calle Jimenez, Caibarien, Las Villas Province	Maximo Gomez 30, Caibarien, Las Villas Province

NOTE: An asterisk (*) indicates that the station is believed to be inactive. Information on addresses of studios and transmitting antennas should be used with caution.

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Camaguey	680	CMJE	1	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMEC	Calle 1, Alturas de Jayama, Barrio Maraguan, Camaguey Province
Camaguey	880	CMJB	1	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMEF	Finca Guernica, Camaguey Province
Camaguey	920	CMJL	10	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Finca Villa Rosita, kilometer 577 on Carretera Central, Camaguey Province
Camaguey	960	CMJN	1	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Kilometer 572.8 on Carretera Central, Camaguey Province
Camaguey	1,000	CMJG	1	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Finca de Santa Maria de Jamaya, Camaguey Province
Camaguey	1,030	CMJR	1	Radio Revolucion	Republica 286, Camaguey, Camaguey Province	Villa Maria, kilometer 575 on Carretera Central (Oeste kilo- meter 7), Camaguey Province
Camaguey	1,060	CMJA	0.25	N.A.	Maceo 83, Camaguey, Camaguey Province	Maceo 83, Camaguey, Camaguey Province
Camaguey	1,100	CMFA	1	Radio Cadena Agramonte	Avellaneda 215, Camaguey, Camaguey Province	Camaguey, Camaguey Province
Camaguey	1,160	CMJK	0.5	Radio Cadena Agramonte (relay)	Relay station. See Camaguey, 1,100 kc, CMFA	Finca Jamaya, kilometer 574 on Carretera Central, Camaguey Province
Camaguey	1,270	CMJC	1	N.A.	Independencia 308, Camaguey Province	General Gomez 648, Camaguey, Camaguey Province
Camaguey	1,340	CMJF	1	Radio Camaguey	Carretera del Aeropuerto letra D, Camaguey, Camaguey Province	Carretera del Aeropuerto letra D, Camaguey, Camaguey Province

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Camaguey	1,440	CMJW	0.25	Radio Tiempo	Avenida de los Martires 369, Camaguey, Camaguey Province	Avenida de los Martires 375, Camaguey, Camaguey Province
Cardenas	1,470	CMGE	0.25	Radio Ciudad Bandera	Cespedes 470, Cardenas, Matanzas Province	Cespedes 470, Cardenas, Matanzas Province
Ciego de Avila	580	CMJP	0.5	Radio Cuba Revolucionaria	Republica 61 Oeste, Ciego de Avila, Camaguey Province	Avenida G. Menocal y 3ra, Ciego de Avila, Camaguey Province
Ciego de Avila	700	CMJT	1	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMBC	Finca La Palma, Ciego de Avila, Camaguey Province
Ciego de Avila	760	CMJY	1	Radio Cadena Agramonte (relay)	Relay station. See Camaguey, 1,100 kc, CMFA	Finca Santa Barbara, Ciego de Avila, Camaguey Province
Ciego de Avila	800	CMJS	1	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Ciego de Avila, Camaguey Province
Ciego de Avila	840	CMJM	0.5	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Finca El Aserradero, kilometer 462, Ciego de Avila, Camaguey Province
Ciego de Avila	900	CMJV	1	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Finca La Loma, Barrio Sur, Ciego de Avila, Camaguey Province
Ciego de Avila	1,150	CMJZ	0.25	Radio Moron (relay)	Relay station. See Moron, 1,230 kc, CMJX	Finca La Loma, kilometer 465 on Carretera Central, Ciego de Avila, Camaguey Province
Ciego de Avila	1,190	CMJD	0.25	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMBF	Republica 36, Ciego de Avila, Camaguey Province
Ciego de Avila	1,370	CMJH	0.5	N.A.	H. del Castillo 5 Norte, Ciego de Avila, Camaguey Province	H. del Castillo 5 Norte, Ciego de Avila, Camaguey Province

S-E-C-R-E-T

S-E-C-R-E-T

<u>City</u>	<u>Frequency (Kilocycles)</u>	<u>Call Letters</u>	<u>Power (Kilowatts)</u>	<u>Station Slogan</u>	<u>Studio Address</u>	<u>Address of Transmitting Antennas</u>
Ciego de Avila	1,470	CMJO	0.25	N.A.	Cuba 213 Oeste, Ciego de Avila, Camaguey Province	Finca Escandon, Ciego de Avila, Camaguey Province
Cienfuegos	680	CMHN	1	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMBC	Finca Nuestra Senora de Regla, Cienfuegos, Las Villas Province
Cienfuegos	720	CMHU	0.25	Radio Tiempo	Calle 37 No. 5416 (antes Prado 190), Cienfuegos, Las Villas Province	Calle 37 No. 3202, Cienfuegos, Las Villas Province
Cienfuegos	940	CMHH	0.25	N.A.	Calle 37 No. 5416 (antes Prado 190), Cienfuegos, Las Villas Province	Calle 37 No. 3202, Cienfuegos, Las Villas Province
Cienfuegos	*1,040	*CMHF	0.1	N.A.	Prado corner of Arguelles, Cienfuegos, Las Villas Province	Cid y Callejon, Playa Alegre, Cienfuegos, Las Villas Province
Cienfuegos	*1,350	*CMHJ	0.25	N.A.	N.A.	Malecon, corner of B y Luz, Cienfuegos, Las Villas Province
Colon	*1,030	*CMGO	0.25	N.A.	N.A.	N.A.
Colon	1,340	CMGU	0.25	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Finca La Chilena, Colon, Matanzas Province
Consolacion del Norte	*1,400	*CMAX	0.25	N.A.	Consolacion del Norte, Pinar del Rio Province	Consolacion del Norte, Pinar del Rio Province
Consolacion del Sur	880	CMAG	1	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMEF	Kilometer 156 on Carretera Central, Consolacion del Sur, Pinar del Rio Province
Cruces	1,210	CMHK	1	Emisora CMHK	Heredia 61, Cruces, Las Villas Province	Finca La Francia, Cruces, Las Villas Province
Florida	1,400	CMJI	0.25	Radio Tropico	N.A.	Carretera Central, corner of Presidente Gomez y Eguzquiza, Florida, Las Villas Province

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<u>City</u>	<u>Frequency (Kilocycles)</u>	<u>Call Letters</u>	<u>Power (Kilowatts)</u>	<u>Station Slogan</u>	<u>Studio Address</u>	<u>Address of Transmitting Antennas</u>
Fomento	1,080	CMHE	0.25	Centro Radial Revolucionario (relay)	Relay station. See Santa Clara, 810 kc, CMHW	N.A.
Guane	*1,210	*CMAP	0.25	N.A.	N.A.	N.A.
Guantanamo	N.A.	CMDM	N.A.	N.A.	Estrada Palma 718, Guantanamo, Oriente Province	Estrada Palma 718, Guantanamo, Oriente Province
Guantanamo	*710	*CMDU	0.25	N.A.	Marti 905, Guantanamo, Oriente Province	Marti 905, Guantanamo, Oriente Province
Guantanamo	950	CMDJ	0.25	Circuito Oriental de Radio (relay)	Relay station. See Santiago de Cuba, 850 kc, CMKC	Finca Alturas del Polanco, kilo- meter 1, Guantanamo, Oriente Province
Guantanamo	1,070	CMKS	1	Radio Savon	Luz Caballero, 1053, corner of 2 y 3, Oriente Province	Luz Caballero 1053, corner of 2 y 3, Guantanamo, Oriente Province
Guantanamo	1,110	CMDN	0.25	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	San Gregorio 1066, Altos Guantanamo, Oriente Province
Guantanamo	1,130	CMKH	0.25	N.A.	24 corner of Donato Marmol, Guantanamo, Oriente Province	Carretera Garcia Sur 1006, Guantanamo, Oriente Province
Guantanamo	1,230	CMKA	0.25	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	7 Oeste, esquina 2 y 3 Sur, Guantanamo, Oriente Province
Guantanamo	*1,290	*CMDG	0.25	N.A.	N.A.	Beneficencia 1039, Guantanamo, Oriente Province

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Guantanamo	1,400	CMKI	0.25	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMBF	2 Oeste, esquina Lopez y Garcia, Guantanamo, Oriente Province
Havana	550	CMCY	15	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Finca La Guira, Carretera de Regla, Havana Province
Havana	590	CMW	25	Radio Rebelde	Edificio Eda, Calle "O" 216, Vedado, Havana, Havana Province	Finca El Guarapo, Calzada de Rancho Boyeros, Havana Province
Havana	630	CMQ	50	Radio CMQ	Edificio Radiocentro, Calle "M" 213, Vedado, Havana, Havana Province	Finca Segundo Falcon, Reparto Ermita, Arroyo Arenas, Havana Province
Havana	660	CMCU	5	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Cienaga, Calzada de Rancho Boyeros, Havana Province
Havana	690	CMEC	50	Radio Progreso	Edificio Radio Progreso, Calle Infanta between 25th and 27th, Vedado, Havana, Havana Province	Finca P. Blanco, Barrio de Cojimar, Guanabacoa, Havana Province
Havana	730	CMCA	10	The Friendly Voice of Cuba	Plaza de Marti 107, Havana, Havana Province	Finca San Pablo, Barrio Falcon, Reparto Ermita, Arroyo Arenas, Havana Province
Havana	760	CMCD	10	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Finca El Tamarindo, Regla, Havana Province
Havana	790	CMCH	10	Radio Cadena Habana	San Jose 104, Havana, Havana Province	Cayo Cruz, Bahia, Havana Province
Havana	830	CMEZ	5	Radio CMEZ	Plaza de Marti 206, Havana, Havana Province	Infanzon, Calzada de Rancho Boyeros, Havana Province
Havana	860	CMBL	15	Radio Internacional	Plaza de Marti 206, Havana, Havana Province	Finca La Pastora, Arroyo Apolo, Havana Province

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<u>City</u>	<u>Frequency (Kilocycles)</u>	<u>Call Letters</u>	<u>Power (Kilowatts)</u>	<u>Station Slogan</u>	<u>Studio Address</u>	<u>Address of Transmitting Antennas</u>
Havana	910	CMCF	10	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMRF	Finca La Cascada, Calzada de Rancho Boyeros, Havana Province
Havana	950	CMBF	10	Radio Musical Nacional	Edificio Radiocentro, Calle "M" 213, Vedado, Havana, Havana Province	Finca Segundo Falcon, Reparto Ermita, Arroyo Arenas, Havana Province
Havana	980	CMCK	5	El Periodico del Aire	Independencia y Arroyo Mordazo, Havana, Havana Province	Puentes Grandes, Avenida Rancho Boyeros y Mordazo, Havana, Havana Province
Havana	1,010	CMZ	5	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMRF	Consejo Corporativo, Columbia, Marianao, Havana Province
Havana	1,060	CMCX	10	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Finca El Regusio, Regla, Havana Province
Havana	1,090	CMBS	0.25	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMBC	Edificio Atlantico, Vedado, Havana, Havana Province
Havana	1,140	CMBY	0.25	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMRF	Avenida Menocal 159, Havana, Havana Province
Havana	1,160	CMBQ	N.A.	Radio Enciclopedia Popular	Edificio Sierra Maestra, Havana, Havana Province	Rancho Villa Maria, Guanabacoa, Havana Province
Havana	1,190	CMK	0.25	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Almendares 156, Havana, Havana Province
Havana	1,260	CMCI	5	Reloj Nacional	12th floor, Edificio Retiro Odontologico, Calle "L" 353, Havana, Havana Province	Finca Rosalia Abreu Palatino, Havana Province
Havana	1,330	CMCB	1	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Finca Segundo Falcon, Reparto Ermita, Arroyo Arenas, Havana Province
Havana	1,360	CMBG	0.25	Radio Popular	Mercado de Carlos III, Havana, Havana Province	San Rafael 406, Havana, Havana Province

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<u>City</u>	<u>Frequency (Kilocycles)</u>	<u>Call Letters</u>	<u>Power (Kilowatts)</u>	<u>Station Slogan</u>	<u>Studio Address</u>	<u>Address of Transmitting Antennas</u>
Havana	*1,390	*CMBX	0.25	N.A.	N.A.	N.A.
Havana	1,420	CMCQ	0.25	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Via Alegre 269, Vibora, Havana Province
Havana	1,460	CMCM	0.25	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Velasquez 10, Luyano, Havana Province
Havana	1,490	CMOX	0.25	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMBC	Calle 10 No. 423, Vedado, Havana, Havana Province
Havana	1,520	CMBD	0.25	CMBD Revolucionaria	Calle 26 No. 877, Vedado, Havana, Havana Province	Calle 26 No. 877, Vedado, Havana, Havana Province
Havana	1,550	CMCG	0.25	Radio Unidad	9 Parque Reparto A. de Embil, Havana, Havana Province	Calle 124 No. 4318, Marianao, Havana Province
Holguin	560	CMKM	5	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMBF	Finca La Calera, kilometer 774 on Carretera Central, Holguin, Oriente Province
Holguin	600	CMKV	2.5	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Ciudad Jardin, kilometer 770 on Carretera Central, Holguin, Oriente Province
Holguin	670	CMKF	1	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMBC	Finca San Antonio, Cuarton de Pedernales, Barrio de Guirabo, Holguin, Oriente Province
Holguin	740	CMKJ	10	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Finca Aguilera, Carretera Central y Cacocum, Holguin, Oriente Province
Holguin	770	CMDC	1	Circuito Oriental de Radio (relay)	Relay station. See Santiago de Cuba, 850 kc, CMKC	Reparto, Hato de Holguin, Oriente Province
Holguin	*870	*CMDY	0.25	N.A.	N.A.	N.A.

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Holguin	970	CMKD	1	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Finca La Dehesa, Holguin, Oriente Province
Holguin	1,050	CMKF	0.25	N.A.	Avenida de Frexes, corner of Rastro, Holguin, Oriente Province	Avenida de Frexes, corner of Rastro, Holguin, Oriente Province
Holguin	1,150	CMDL	1	Radio Holguin	Frexes 74 and Libertad, Holguin, Oriente Province	N.A.
Holguin	1,220	CMKO	0.25	N.A.	Desamparaderos 21, Holguin, Oriente Province	Desamparaderos 21, Holguin, Oriente Province
Holguin	*1,410	*CMDR	0.25	N.A.	N.A.	N.A.
Holguin	1,580	CMDS	0.25	Radio Norte	Avenida Maximo Gomez 62, Holguin, Oriente Province	Kilometer 772 on Carretera Central, Holguin, Oriente Province
Jatibonico	540	CMJJ	0.25	Radio Jatibonico	Plaza de Marti, Jatibonico, Camaguey Province	Solitario 13, Jatibonico, Camaguey Province
Jovellanos	960	CMGN	0.5	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Kilometer 159 on Carretera Central, Jovellanos, Matanzas Province
Manzanillo	1,590	CMDF	0.25	N.A.	Jose Miguel Gomez, corner of Codina and Jose Antonio Saco, Manzanillo, Oriente Province	Jose Miguel Gomez, corner of Codina and Jose Antonio Saco, Manzanillo, Oriente Province
Matanzas	910	CMGX	1	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMBF	N.A.
Matanzas	930	CMGF	0.25	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Merced 37, Matanzas, Matanzas Province
Matanzas	1,160	CMGW	0.5	Radio Veintiseis	Milanes 45, Matanzas, Matanzas Province	Finca Maicas, kilometer 101, Matanzas, Matanzas Province

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Matanzas	1,240	CMGY	0.25	Radio Veintiseis (relay)	Relay station. See Matanzas, 1,160 kc, CMGW	Milanes 60, Matanzas, Matanzas Province
Matanzas	1,400	CMGL	0.25	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Alturas de Monserrat, Matanzas Province
Matanzas	1,440	CMCM	0.25	Radio Atenas	Contreras 69, Matanzas, Matanzas Province	Carretera de San Juan 119, Matanzas Province
Moron	*620	*CMFB	0.25	N.A.	N.A.	N.A.
Moron	1,230	CMJX	0.25	Radio Moron	Serafin Sanchez 48, Moron, Camaguey Province	Serafin Sanchez 48, Moron, Camaguey Province
Moron	*1,320	*CMCF	0.25	N.A.	N.A.	N.A.
Moron	1,420	CMJU	0.25	Radio Cuba	Marti 170, Moron, Camaguey Province	Marti 170, Moron, Camaguey, Camaguey Province
Nuevitas	1,300	CMJQ	1	N.A.	Carretera Garcia and Marti, Nuevitas, Camaguey Province	Carretera Garcia and Marti, Nuevitas, Camaguey Province
Palma Soriano	1,430	CMKZ	0.25	N.A.	N.A.	Marti and Calle 21, Palma Soriano, Oriente Province
Pinar del Rio	680	CMAF	1	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMBC	Calzada Coloma, kilometer 2, Pinar del Rio, Pinar del Rio Province
Pinar del Rio	*800	*CMAW	0.25	N.A.	Manuel Landa 6, Pinar del Rio, Pinar del Rio Province	Isabel la Catolica y Freijas, Pinar del Rio, Pinar del Rio Province
Pinar del Rio	840	CMAN	1	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Finca Capote, kilometer 174 on Carretera Central, Pinar del Rio Province

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Pinar del Rio	920	CMAQ	1	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Finca Capote, kilometer 174 on Carretera Central, Pinar del Rio Province
Pinar del Rio	990	CMAS	0.25	N.A.	N.A.	Edificio El Globo, Marti y Recreo, Pinar del Rio, Pinar del Rio Province
Pinar del Rio	1,070	CMAB	5	N.A.	Maceo Oeste 20, corner of Rosario, Pinar del Rio, Pinar del Rio Province	Barrio Primero de Ovas, Pinar del Rio, Pinar del Rio Province
Pinar del Rio	*1,190	*CMAR	0.25	N.A.	N.A.	N.A.
Pinar del Rio	*1,300	*CMAE	0.25	N.A.	N.A.	N.A.
Pinar del Rio	1,340	CMAL	0.25	N.A.	Maceo, corner of Rosario, Pinar del Rio, Pinar del Rio Province	Finca Vegetal, Carretera to San Juan y Martinez, Pinar del Rio Province
Puerto Padre	1,350	CMKY	0.25	Radio Puerto Padre	E. Rosendo 49, Puerto Padre, Oriente Province	E. Rosendo 49, Puerto Padre, Oriente Province
Sagua la Grande	1,570	CMHR	0.25	N.A.	Ave. Gomez, Sagua la Grande, Las Villas Province	Reperto Delicias, Sagua la Grande, Las Villas Province
San Cristobal	1,030	CMAC	0.25	Radio San Cristobal	Capitan Reyes 19, San Cristobal, Pinar del Rio Province	Capitan Reyes 19, San Cristobal, Pinar del Rio Province
Sancti Spiritus	780	CMHB	1	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMEF	Finca La Esperanza, Carretera del Jibaro, Sancti Spiritus, Las Villas Province
Sancti Spiritus	990	CMHT	1	Radio Nacional	Luz Caballero 4 Norte, Sancti Spiritus, Las Villas Province	Finca San Jose de las Casas, Sancti Spiritus, Las Villas Province

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Sancti Spiritus	*1,250	*CMHP	0.25	N.A.	N.A.	Marti 198, corner of Santa Inez, Sancti Spiritus, Las Villas Province
Sancti Spiritus	1,450	CMHL	0.25	Radio Tiempo	Serafin Sanchez 9 Sur, Sancti Spiritus, Las Villas Province	Santa Ana 25, Sancti Spiritus, Las Villas Province
San Luis	1,460	CMKQ	0.5	Radio San Luis	General Garcia 67, corner of Cespedes y Carbo, San Luis, Oriente Province	General Garcia 67, corner of Cespedes y Carbo, San Luis, Oriente Province
Santa Clara	570	CMHI	10	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Kilometer 303 on Carretera Central, Santa Clara, Las Villas Province
Santa Clara	640	CMHQ	15	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Avenida Eutimio Falla Bonet kilometer 62, Santa Clara, Las Villas Province
Santa Clara	670	CMHG	1	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMBC	Avenida Eutimio Falla Bonet kilometer 20, Caibarien, Las Villas Province
Santa Clara	810	CMHW	1	Centro Radial Revolucionario	Parque Vidal, corner of Rolando Pardo, Santa Clara, Las Villas Province	Kilometer 303 on Carretera Central, Santa Clara, Las Villas Province
Santa Clara	890	CMHD	1	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMBF	Finca Columbia, kilometer 2, Avenida Eutimio Falla Bonet, Santa Clara, Las Villas Province
Santa Clara	970	CMHZ	0.25	N.A.	Kilometer 304 on Carretera Central, Santa Clara, Las Villas Province	Kilometer 304 on Carretera Central, Santa Clara, Las Villas Province
Santa Clara	1,130	CMHM	1	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Finca Santa Aracelia, kilometer 295 Oeste Carretera Central, Santa Clara, Las Villas Province

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Santa Clara	1,160	CMHV	0.25	CMHA Revolucionaria (relay)	Relay station. See Santa Clara, 1,280 kc, CMHA	N.A.
Santa Clara	1,280	CMHA	1	CMHA Revolucionaria	Calles Buenviaje y Parque, Santa Clara, Las Villas Province	Calles Anita Pegudo and Felix Huergo, Santa Clara, Las Villas Province
Santa Clara	*1,310	*CMHO	1	N.A.	Kilometer 2 on Carretera Sagua la Grande 254, Santa Clara, Las Villas Province	Kilometer 2 on Carretera Sagua la Grande 254, Santa Clara, Las Villas Province
Santa Clara	1,410	CMHC	1	N.A.	Parque Vidal No. 1 altos, Santa Clara, Las Villas Province	Finca Columbia, kilometer 3, Avenida Eutimio Falla Bonet, Santa Clara, Las Villas Province
Santa Clara	1,480	CMHX	0.25	N.A.	Gran Hotel, Parque Vidal, Santa Clara, Las Villas Province	Gran Hotel, Parque Vidal, Santa Clara, Las Villas Province
Santa Fe	1,370	CMEN	0.25	N.A.	Calles Norte y Marti, Santa Fe, Isle of Pines, Havana Province	N.A.
Santiago de Cuba	630	CMKU	2	Radio CMQ (relay)	Relay station. See Havana, 630 kc, CMQ	Right river bank of the Rio Gascon, Barrio Caimanes, Santiago de Cuba, Oriente Province
Santiago de Cuba	680	CMDB	1	Radio Progreso (relay)	Relay station. See Havana, 690 kc, CMBC	Finca Sueno, kilometer 3 on Carretera Central, Santiago de Cuba, Oriente Province
Santiago de Cuba	800	CMKL	2	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	Finca San Matias, kilometer 967 on Carretera Central, Santiago de Cuba, Oriente Province

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City	Frequency (Kilocycles)	Call Letters	Power (Kilowatts)	Station Slogan	Studio Address	Address of Transmitting Antennas
Santiago de Cuba	850	CMKC	1	Circuito Oriental de Radio	Aguilera 511 Altos, Santiago de Cuba, Oriente Province	Calle 6 at F, Reparto, Santiago de Cuba, Oriente Province
Santiago de Cuba	890	CMDZ	0.25	Radio Cadena Santiago	Aguilera 514, Santiago de Cuba, Oriente Province	Finca San Juan, Santiago de Cuba, Oriente Province
Santiago de Cuba	930	CMKN	1	Radio Rebelde (relay)	Relay station. See Havana, 590 kc, CMW	Loma Quintero, kilometer 965 on Carretera Central, Santiago de Cuba, Oriente Province
Santiago de Cuba	*1,000	*CMKW	0.25	N.A.	Estrada Palma 658, Santiago de Cuba, Oriente Province	Finca San Matias, kilometer 967 on Carretera Central, Santiago de Cuba, Oriente Province
Santiago de Cuba	*1,030	*CMDW	0.5	N.A.	Aguilera 559, Santiago de Cuba, Oriente Province	Loma Quintero, kilometer 965 on Carretera Central, Santiago de Cuba, Oriente Province
Santiago de Cuba	*1,060	*CMDH	0.25	Radio Hernandez	Avenida V. Garzon 320, Santiago de Cuba, Oriente Province	N.A.
Santiago de Cuba	*1,090	*CMKR	1	N.A.	B. Maso 515, Santiago de Cuba, Oriente Province	Calle 6, P. Aguero, Santiago de Cuba, Oriente Province
Santiago de Cuba	*1,120	*CMDK	0.25	Radio Turquino	N.A.	N.A.
Santiago de Cuba	1,170	CMKB	1	Radio Musical Nacional (relay)	Relay station. See Havana, 950 kc, CMBF	Finca La Cruz, Barrio Garzon, Santiago de Cuba, Oriente Province
Santiago de Cuba	*1,230	*CMDI	0.25	N.A.	N.A.	N.A.
Santiago de Cuba	*1,320	*CMDA	1	N.A.	N.A.	Villa Maria, kilometer 13 on Carretera Central, Santiago de Cuba, Oriente Province
Santiago de Cuba	1,550	CMDV	0.25	Radio Valpin	Aguilera 505, Santiago de Cuba, Oriente Province	Aguilera 505, Santiago de Cuba, Oriente Province

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Approved For Release 2001/08/31 : CIA-RDP79T01049A002600030001-9

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<u>City</u>	<u>Frequency (Kilocycles)</u>	<u>Call Letters</u>	<u>Power (Kilowatts)</u>	<u>Station Slogan</u>	<u>Studio Address</u>	<u>Address of Transmitting Antennas</u>
Varadero	1,580	CMGB	0.25	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	N.A.
Victoria de las Tunas	840	CMDQ	1	N.A.	Hotel Gran Casino, Victoria de las Tunas, Oriente Province	Finca Las Tunas, Victoria de las Tunas, Oriente Province
Victoria de las Tunas	1,240	CMKE	0.25	N.A.	N.A.	Finca El Rincon, kilometer 1, Victoria de las Tunas, Oriente Province
Victoria de las Tunas	1,280	CMDP	0.25	Reloj Nacional (relay)	Relay station. See Havana, 1,260 kc, CMCI	N.A.
Victoria de las Tunas	1,490	CMKG	0.25	Radio Tunas	Angel Guardia 151, Victoria de las Tunas, Oriente Province	N.A.
Victoria de las Tunas	1,520	CMKT	1	N.A.	V. Garcia 314, Victoria de las Tunas, Oriente Province	N.A.

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FM Radiobroadcasting

Frequency modulation (FM) broadcasting as it is commonly known in the US does not exist in Cuba. Insofar as can be determined, only one station, Havana's CMBQ, has broadcast entertainment programs on FM, and this was more or less a byproduct of the station's attempts to provide a Muzak-type service for businesses and commercial concerns in the Havana area. CMBQ operates a mediumwave transmitter, but it is not known if the FM transmissions have continued.

Figure 9. Cuba: Electronics Facilities: Broadcasting Station Schedules and Network Associations

The following information supersedes that in Figure 9:

Cuban Domestic Radiobroadcasting System

Of the 100 domestic radiobroadcasting stations that are estimated presently to be operational in Cuba, approximately 70 percent are members of one of the five nationwide networks, another 10 percent are in minor provincial networks, and the remaining 20 percent are believed to be unaffiliated low-powered stations presenting programming to suit some specific local need. All stations broadcast on mediumwave (540 to 1,600 kc) only, and all are under the control of ICR. The ICR deputy director for domestic radiobroadcasting is Jose Antonio Cainas Sierra.

The five major networks (the Radio Rebelde, Radio CMQ, Radio Progreso, Radio Musical Nacional, and Reloj Nacional), all of which have their studios in Havana, extend from Pinar del Rio in the west to Oriente in the east, covering the entire island. Of considerably less importance are the several minor networks that are composed of a few low-powered transmitters each. These seem to be organized on a provincial basis providing local news and relaying the national and world news from Havana. The most noteworthy are the following: the Circuito Oriental de Radio network, which serves Oriente Province from studios in Santiago de Cuba; the Radio Cadena Agramonte network, serving Camaguey Province from studios in the city of Camaguey; and the Centro Radial Revolucionario network, serving Las Villas Province from studios in Santa Clara.

In addition to network stations, there are about 20 low-powered local stations still in operation. Many of these apparently are kept on the

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air only to block a frequency with music so that local listeners will not be able to tune in a foreign station that would otherwise be audible. A case in point is the Havana station CMBQ, which was moved from 1,150 kc to 1,160 kc in order to jam the anti-Castro transmissions of Radio Americas [REDACTED]. Another Havana station was moved 20 kc to jam Miami's WMIE on 1,140 kc. A Matanzas station was also moved to 1,160 kc for this purpose. Both Havana outlets present nothing but music, while the Matanzas station relays all the transmissions of another station in the same city.

Broadcasting stations are not the only means of interference employed against transmissions from abroad. Regular jamming devices have been observed on 710 kc (used by Miami's WGBS), on 6,000 kc (used by Radio Americas' shortwave relay transmitter), and on various shortwave frequencies used by WRUL and the Voice of America for their Spanish-language broadcasts to Latin America.

It must be emphasized that accurate information concerning Cuban broadcasting stations is extremely difficult to obtain. The most reliable data have come from monitoring the stations themselves, but this is not always possible because of the long distances involved and the low power of the target transmitters. With this situation in mind, caution should be used in accepting specific details concerning Cuban radio stations as enumerated. Information concerning stations in the provinces, in particular, should be used with reserve.

Radio Rebelde Network

Controlled by
Instituto Cubano de Radiodifusion (ICR)

11,750 kc - COCY, Havana 1 kw (inactive)
6,435 kc - COCY, Havana 1 kw (inactive)
1,420 kc - CMCQ, Havana 1/4 kw
1,110 kc - CMDN, Guantanamo 1/4 kw
1,060 kc - CMCX, Havana 10 kw
960 kc - CMJN, Camaguey 1 kw
960 kc - CMGN, Jovellanos 1/2 kw
930 kc - CMKN, Santiago de Cuba 1 kw
930 kc - CMGF, Matanzas 1/4 kw
840 kc - CMJM, Ciego de Avila 1/2 kw
840 kc - CMAN, Pinar del Rio 1 kw
600 kc - CMKV, Holguin 2-1/2 kw
590 kc - CMW, Havana 25 kw (key station)
570 kc - CMHI, Santa Clara 10 kw
550 kc - CMCY, Havana 15 kw

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The studios of this network are announced as being in the Edificio Eda, Calle "O" 216, between 23d and 25th, Vedado, Havana. The network director is Violeta Casals.

<u>Greenwich Mean Time</u>	<u>All programs are in Spanish</u>
1015 - 0315	Approximate over-all transmission time:
1015 - 1030	NEWS (world, national) (not Sunday)
1030 - 1115	NEWS (agricultural) (not Sunday)
1200 - 1230	NEWS (world, national) (not Sunday)
1230 - 1245	PRESS REVIEW (not Sunday)
1800 - 1830	NEWS/COMMENT (world, national) (not Sunday)
2300 - 2330	NEWS (world, national) (not Sunday)
2330 - 2345	COMMENT (not Sunday)
0300 - 0315	NEWS (world, national) (not Monday)

Radio CMQ Network

Controlled by
Instituto Cubano de Radiodifusion (ICR)

9,670 kc - COCQ, Havana 1 kw (inactive)
1,460 kc - CMCM, Havana 1/4 kw
1,190 kc - CMK, Havana 1/4 kw
920 kc - CMAQ, Pinar del Rio 1 kw
920 kc - CMJL, Camaguey 10 kw
900 kc - CMJV, Ciego de Avila 1 kw
740 kc - CMKJ, Holguin 10 kw
660 kc - CMCU, Havana 5 kw
640 kc - CMHQ, Santa Clara 15 kw
630 kc - CMKU, Santiago de Cuba 2 kw
630 kc - CMQ, Havana 50 kw (key station)

The studios of this network are in the Edificio Radiocentro, Calle "M" between 21st and 23d, Vedado, Havana. The network director is Amaury Perez.

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<u>Greenwich Mean Time</u>	<u>All programs are in Spanish</u>
1028 - 0400	Approximate over-all transmission time:
1030 - 1140	NEWS (world, national) (not Sunday-Monday)
1230 - 1245	NEWS (world, national) (not Sunday)
1800 - 1845	NEWS/COMMENT (world, national) (not Sunday)
2330 - 2400	NEWS/COMMENT (world, national) (not Sunday)
0330 - 0400	NEWS/COMMENT (world, national) (not Monday)

Radio Progreso Network

Controlled by
Instituto Cubano de Radiodifusion (ICR)

9,363 kc - COBC, Havana 1 kw (inactive)
 1,490 kc - CMOX, Havana 1/4 kw
 700 kc - CMJT, Ciego de Avila 1 kw
 690 kc - CMBC, Havana 50 kw (key station)
 680 kc - CMDB, Santiago de Cuba 1 kw
 680 kc - CMAF, Pinar del Rio 1 kw
 680 kc - CMHN, Cienfuegos 1 kw
 680 kc - CMJE, Camaguey 1 kw
 670 kc - CMHG, Santa Clara 1 kw
 670 kc - CMKP, Holguin 1 kw

The studios of this network are in the Edificio Radio Progreso, on Calle Infanta between 25th and 27th, Vedado, Havana. The network director is Celestino Garcia Suarez.

<u>Greenwich Mean Time</u>	<u>Programs are in Spanish unless otherwise indicated</u>
1025 - 0505	Approximate over-all transmission time:
1030 - 1315	NEWS (world, national, local) (not Sunday)
1655 - 1725	NEWS/COMMENT (world, national) (not Sunday)
2250 - 2320	NEWS/COMMENT (world, national) (not Sunday)
0300 - 0330	NEWS (world, national) (not Monday)
0400 - 0500	"RADIO FREE DIXIE" program in English to Negroes in the United States (Saturday only)
0500 - 0505	NEWS SUMMARY (not Monday)

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Radio Musical Nacional Network

Controlled by
Instituto Cubano de Radiodifusion (ICR)

1,400 kc - CMKI, Guantanamo 1/4 kw
1,190 kc - CMJD, Ciego de Avila 1/4 kw
1,170 kc - CMKB, Santiago de Cuba 1 kw
1,140 kc - CMBY, Havana 1/4 kw
1,010 kc - CMZ, Havana 5 kw
950 kc - CMBF, Havana 10 kw (key station)
910 kc - CMCF, Havana 10 kw
910 kc - CMGX, Matanzas 1 kw
890 kc - CMHD, Santa Clara 1 kw
880 kc - CMAG, Consolacion del Sur 1 kw
880 kc - CMJB, Camaguey 1 kw
780 kc - CMHB, Sancti Spiritus 1 kw
560 kc - CMKM, Holguin 5 kw

The studios of this network are announced as being in the Edificio Radiocentro, Calle "M" between 21st and 23d, Vedado, Havana. The network director is Orlando Martinez.

<u>Greenwich Mean Time</u>	<u>All programs are in Spanish</u>
1200 - 0500	Over-all transmission time. This cultural network devotes all of its broadcast time to cultural talks and classical and folk music.

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Reloj Nacional Network

Controlled by
Instituto Cubano de Radiodifusion (ICR)

1,580 kc - CMGB, Varadero 1/4 kw
1,400 kc - CMGL, Matanzas 1/4 kw
1,340 kc - CMGU, Colon 1/4 kw
1,330 kc - CMBC, Havana 1 kw
1,280 kc - CMDP, Victoria de las Tunas 1/4 kw
1,260 kc - CMDE, Bayamo 1/4 kw
1,260 kc - CMCI, Havana 5 kw (key station)
1,230 kc - CMKA, Guantanamo 1/4 kw
1,130 kc - CMHM, Santa Clara 1 kw
1,000 kc - CMJG, Camaguey 1 kw
970 kc - CMKD, Holguin 1 kw
800 kc - CMKL, Santiago de Cuba 2 kw
800 kc - CMJS, Ciego de Avila 1 kw
760 kc - CMCD, Havana 10 kw

The studios of this network are announced as being on the 12th floor of the Edificio Retiro Odontologico on Calle "L" between 21st and 23d, Havana. The network director is Santiago Frayle.

Greenwich
Mean Time

All programs are in Spanish

0000 - 2400

This network broadcasts 24 hours a day and presents only news bulletins, public service announcements, and political propaganda punctuated by time announcements every minute. The first 5 minutes of each half hour are devoted to a news summary with the remaining 25 minutes being given over to amplification of the summary and less important items. From 1300 GMT on Sundays to 1600 GMT on Mondays, transmissions consist wholly of political propaganda with minute time checks.

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Figure 10. Cuba: Electronics Facilities: Proposed International Radiobroadcasting Service (Map)

The following information updates that on the map:

Radio Havana Cuba

The Cuban international service, or Radio Havana Cuba, as it is more popularly known, operates from studios on the fifth floor of the Edificio Radio Progreso, Calle Infanta between 25th and 27th, Vedado, Havana. Transmitters are located outside Havana about 2 miles south of the town of Bauta on the east side of the road to Cayo la Rosa on the northern edge of Lake Ariguanabo (approximately 25°27' N - 82°33' W). Signals are sent from the Edificio Radio Progreso via telephone lines (through the telephone centers at Carlos III and Subirena Streets and at "B" and 19th Streets) to the Havana Libre Hotel (formerly the Havana Hilton) penthouse, from which they are sent via microwave to the transmitter site. An emergency studio, tape recorders, and associated equipment are at the transmitter site should the telephone/microwave link from Havana fail. The transmitter site has two 100-kw transmitters, one 25/30-kw transmitter, and four 10-kw transmitters, several of which are shared with the Cuban press service, Agencia Prensa Latina. At present, Radio Havana Cuba uses no more than four transmitters at one time but, in the past, five transmitters have been observed on the air at the same time.

In addition to the regularly scheduled international service, these transmitters have been known to broadcast special programs in order to take advantage of a particular political situation. For example, when serious disorders broke out in the Dominican Republic late in 1961, broadcasts emanating from a self-styled "clandestine" station, Radio Revolucion del Movimiento Catorce de Junio, called for the overthrow of the Dominican government. Direction-finder (DF) bearings and other technical clues indicated that the Lake Ariguanabo transmitter site was the point of origin.

Radio Havana Cuba announces that it makes its facilities available to political groups from other Latin American countries so that they can beam programs back to their homelands. These programs have been observed as follows: the Peruvian Anti-Imperialist Struggle Movement (Movimiento Peruano de la Lucha Anti-Imperialista) beams the La Voz de Peru Revolucionaria program to Peru on Mondays at 0000 - 0015 GMT; the Guatemalan Information Committee (Comite Guatemalteco de Informacion) transmits the Mensaje a Guatemala program on Wednesdays and Sundays to Guatemala at 0200 - 0215 GMT; and the Dominican Liberation Movement

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(Movimiento de Liberacion Dominicana) broadcasts the Patria Libre program to the Dominican Republic on Thursdays and Saturdays at 02:00 - 02:15 GMT. Similar programs were beamed to Nicaragua and Honduras up until September 1962.

The Cuban international service is controlled by ICR. The ICR deputy director for international broadcasts is Marcos Behemaras. Radio Havana Cuba's current schedule of transmissions is as follows (frequencies in use often vary considerably from the announced frequencies and can also be expected to change according to propagation conditions):

In Arabic (4 hours 40 minutes weekly)

2030 - 2110 to the Mediterranean on 15135 kc

In English (26 hours 50 minutes weekly)

0300 - 0430 to the Americas on 6015 and 5990 kc
0500 - 0600 to the Americas on 6015 and 5990 kc
2020 - 2140 to Europe on 15270 kc

In French (16 hours 20 minutes weekly)

0430 - 0500 to the Americas on 6015 and 5990 kc
1900 - 2020 to Europe on 15270 kc
2110 - 2140 to the Mediterranean on 15135 kc

In Portuguese (5 hours 15 minutes weekly)

2315 - 2400 to Brazil on 11970 kc

In Spanish (126 hours weekly)

0630 - 0730 to Europe and the Mediterranean
1100 - 1830 to the Americas on 15340, 9675, and 6015 kc
1900 - 2030 to Europe and the Mediterranean on 15135 kc
2200 - 2315 to the Americas on 11970, 9675, and 6015 kc
2315 - 2400 to the Americas on 9675 and 6015 kc
0000 - 0100 to the Americas on 11970, 9675, and 6015 kc
0100 - 0220 to the Americas on 11970, 9675, 6015, and 5990 kc
0220 - 0230 to the Americas on 6015 and 5990 kc
0230 - 0300 to the Americas on 11970, 6015, and 5990 kc
0300 - 0600 to the Americas on 11970 and 6060 kc

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Radio Free Dixie

Radio Free Dixie is a 1-hour English-language program heard on Friday nights at 11:00 p.m. E.S.T. over the facilities of the Radio Progreso network. The Radio Progreso network is an integral part of Cuba's domestic broadcasting system, but several of its transmitters, the 50-kw Havana transmitter especially, are powerful enough to be heard in the southern US. The Radio Free Dixie program is beamed to Negroes in the southern United States and is prepared and directed by Robert F. Williams, who is sought by the FBI for an alleged kidnapping in Monroe, North Carolina. Williams is assisted by Jo Salas, a female disc jockey, and Carlos (Moore?), a newscaster. Programs consist of jazz recordings, a half-hour commentary by Williams, a few more recordings, and a final newscast of sharply slanted and distorted news items showing discrimination and segregation in the US. The Havana transmitter of Radio Progreso operates on 690 kc with repeater or relay stations on the following frequencies: 670, 680, 700, and 1,490 kc.

The Friendly Voice of Cuba

CMCA, The Friendly Voice of Cuba, broadcasts from Havana in English and Spanish for listeners in the US. The station formerly operated in Spanish only as CMCA Radio Mambi and was noted throughout the hemisphere for its rabid gutter-type attacks on high officials in both North and Latin America. Robert F. Williams and other US citizens have appeared as commentators on The Friendly Voice, attacking the "Wall Street monopolists," high-ranking personalities in the US Government, discrimination, segregation, and so on. Listeners are requested to send reception reports to Post Office Box 6951, Havana, Cuba. Studios are believed to be at Paseo de Marti 107, Havana, with a transmitter at Finca San Pablo, Barrio Falcon, Arroyo Arenas, Havana Province. The station operates on 730 kc with a reported power of 10 kw and can be heard well in southern Florida. The station director is Angel Hernandez.

<u>Greenwich Mean Time</u>	<u>Programs are in English unless otherwise indicated</u>	
1100 - 0600	Approximate over-all transmission time:	
1100 - 1700	Music programs	
1700 - 1715	NEWS, SPANISH/ENGLISH	(not Sunday)
1715 - 1730	COMMENT	(not Sunday)
1730 - 2300	Music programs	
2300 - 2315	NEWS, SPANISH/ENGLISH	(not Sunday)
2315 - 2330	COMMENT	(not Sunday)
2330 - 0345	Music programs	
0345 - 0400	NEWS, SPANISH/ENGLISH	(irregular)
0400 - 0600	Music programs	

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Figure 11. Cuba Electronics Facilities: Tabulation of All Fixed Point-to-Point Radio Stations (Table)

The title should be amended to read "List of Fixed Radio Stations in Cuba." The information remains unchanged but should be used with reserve, as the majority of these stations have not been verified.

Figure 12. Cuba: Electronics Facilities: Fixed International Point-to-Point Radio Circuits (Map)

For the latest list of Cuban fixed stations operating international circuits, see Union Internationale des Telecommunications (ITU), Geneve, List of Fixed Stations Operating International Circuits, 1 February 1962, p. 37-39. The more than 290 circuits listed in this publication should be used with caution, as the majority have not been verified. In addition to those circuits listed by the ITU, Havana has international telegraph circuits with Warsaw, Prague, and Peking.

Figure 13. Cuba: Electronics Facilities: Radiolocation and Special Services Radio Stations (Map)

The information remains unchanged.

Figure 14. Cuba: Electronics Facilities: Fixed Domestic Point-to-Point Radiotelegraph Circuits (Map)

The circuits shown are now believed to be operated by the Ministry of Communications. In addition, telegraph circuits have been added from Havana to the following cities: Coto Francisco, Matanzas, Mayari, Nueva Gerona, and Puerto Padre.

Figure 15. Cuba: Electronics Facilities: Maritime Coastal and Aeronautical Ground Radio Stations (Map)

The information remains unchanged.

Figure 16. Cuba: Electronics Facilities: US Naval Radio Communications Facilities (Table)

For current information on US Naval Communications, see the latest issues of the following documents:

Army/Navy/Air, JANAP 195 (F), Basic Armed Forces Communication Plans (BAFCOM), CONFIDENTIAL.

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Navy, CNO, DNC5 (B), US Naval Communications Instructions, UNCLASSIFIED.

Navy, CNO, NWP 16, Basic Fleet Operational Communication Doctrine, UNCLASSIFIED.

Figure 16A. Cuba: Electronics Facilities: US Naval Radio Communications Circuits (Map)

For current information on US Naval Communications, see the latest issues of the following documents:

Army/Navy/Air, JANAP 195 (F), Basic Armed Forces Communication Plans (BAFCOM), CONFIDENTIAL.

Navy, CNO, DNC5 (B), US Naval Communications Instructions, UNCLASSIFIED.

Navy, CNO, NWP 16, Basic Fleet Operational Communication Doctrine, UNCLASSIFIED.

Figure 17. Cuba: Electronics Facilities: Telecommunications Facilities in the Havana Area (Map)

For current information on the location of radiobroadcasting and television studios and transmitters in Havana, see the revisions of Figures 7, 8, 9, and 10.

Figure 18. Cuba: Electronics Facilities: Telephone Facilities in the Havana Area (Photographs)

The information remains unchanged.

Figure 19. Cuba: Electronics Facilities: Television and Radiobroadcasting Facilities in the Havana Area (Photographs)

The information remains unchanged.

Figure 20. Cuba: Electronics Facilities: Tropospheric Scatter Radio Facilities (Map and Photographs)

The information remains unchanged.

Figure 21. Cuba: Electronics Facilities: Naval Shipboard Electronics (Tables and Photographs)

For current information on Naval Shipboard Electronics, see the latest edition of Navy, ONI, 32-3-A, Characteristics of Latin American Naval Ships (Cuban section), SECRET.

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Figure 22. Cuba: Electronics Facilities: Agencia Prensa Latina Radio Press Service (Map)

The following information supersedes that on the map:

Agencia Prensa Latina is the official news service of the Cuban government. This press service is transmitted by International Morse code and by radioteletype. In addition to the regularly scheduled press transmissions of Prensa Latina, point-to-point dispatches of other press agencies are also transmitted to New York, Prague, Shanghai, Moscow, Montevideo, and Santiago (Chile).

Transmitters which can be used for the regular press transmissions of Prensa Latina and for telecommunications services, including press dispatches of other press agencies, are located as follows:

1. Two 25-kw Chinese-built transmitters are located approximately 2 miles south of Wajay (Municipio de Marianao) near the transmitting site of the former Union Radio (approximately 22°58'30" N - 82°25'36" W). This reportedly is the transmitting site for all press traffic to Communist Bloc countries.

2. One 25/30-kw transmitter and four 10-kw transmitters are located about 2 miles south of the town of Bauta (Municipio de Bauta) on the northern edge of Lake Ariguanabo (22°57'30" N - 82°32'36" W). Some of these transmitters are used also for the international service broadcasts of Radio Havana Cuba.

The office of APL is located at Calle 23 No. 201, Vedado, Havana. Contact between the downtown terminal office and the two transmitting sites reportedly is maintained by a VHF microwave link located at the Ministry of Communications.

Operational characteristics of radiowave propagation and a possibly limited choice of transmitters preclude the use of regular fixed-frequency broadcasts for Prensa Latina and telecommunications services from Cuba. The following services can usually be found on one or more of the listed frequencies within the transmission hours listed for the service:

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Agencia Prensa Latina Transmissions

<u>Call Sign</u>	<u>Frequency (Kilocycles)</u>	<u>Transmission Hours (Greenwich Mean Time)</u>	<u>Reception Areas</u>
	23357		
CMPL (col- lective call sign)	22002	1200 - 2400	Latin America
	19705	0000 - 0500	
	18768		
	16157		
	15792		
	14848		
	12280	∞	
	10990		
	10876		
	10220		
	7895		
	6875		
	6830		
CLA48	17453	1200 - 2200	Prague
CLA35	13516		
CLA30	11111		
CMPL (col- lective call sign)	10220	0500 - 0700	Prague
	9192		
	6830		
CLA50	18519	2145 - 0030	Montevideo
CLA19	10400		
CLA28	10345		
CLA23	9100		
CLA20	7695		
CLA	17164	1900 - 1930	(to ships; addressed to "Cuban seamen")

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Point-to-Point Transmissions

<u>Call Sign</u>	<u>Frequency (Kilocycles)</u>	<u>Transmission Hours (Greenwich Mean Time)</u>	<u>Reception Areas</u>
CMR30	18522	1300 - 0400	New York
CMR22	13650		
CMR9	10230		
CMR8	8100		
CMR6	7880		
CMR28	5362		
CMR4	5115		
CLA62	23845	2030 - 2230	Shanghai
CLA60	23355	2030 - 2230	
CLA48	17453	2230 - 0200	
CMV27	16049	2230 - 1400	
CLA37	13712	2230 - 1400	
CLA23	9103	2230 - 1400	
CLA45	16445	1700 - 2400	Moscow
CLA38	14620	1500 - 2400	
CLMX45	14415	1500 - 2400	
CML28	10990	2200 - 0500	
CLA27	9900	2200 - 0500	
CLA9	7510	1000 - 1100	

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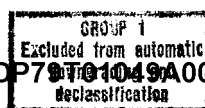
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23 - 30	Army, Ass't. Chief of Staff, Intelligence, Room 1D479, Pentagon <ul style="list-style-type: none"> 1 - C. Eldred Harman, Army Signal Corp. Intell. Agency, 2522, Bldg. A, AHS 1 - ASA (<i>Army Security Agency</i>) 1 - Dorothy Runge, Military Industrial Dept. Area Analysis Intell. Agency, AMS 3 - DCS/Military Operations <ul style="list-style-type: none"> 1 - Ted Sherman, Cuba Section, Western Division, ACSI/Army 1 - Henry J. Basedow, Telecommunications Division, AAIA, Army

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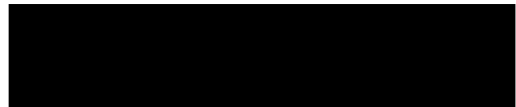
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